

REMARKS

In the Office Action, the Examiner requested that Applicants identify where in the prior applications the features of the present invention are disclosed and which inventor(s) contributed to which features claimed in the present application. The Examiner also objected to claims 36 and 44 based on a purported lack of structural support for the claims. The Examiner further rejected claims 23, 24, 56, and 57 under 35 U.S.C. § 112, first paragraph, based on purported failures to comply with the enablement requirement and the written description requirement; rejected claims 1-10, 13-17, 21, 22, 25, 27-44, 47-55, 58, and 60-72 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,801,216 to Voticky et al. ("Voticky"); rejected claims 11, 12, 18-20, 26, 45, 46, and 59 under 35 U.S.C. § 103(a) as being unpatentable over Voticky in view of U.S. Patent No. 6,937,755 to Orpaz et al. ("Orpaz"); and rejected claims 23, 24, 56, and 57 under 35 U.S.C. § 103(a) as being unpatentable over Voticky, Orpaz, and the Examiner's Official Notice of features allegedly known in the art.

Claims 1-72 are currently pending. Based on the following remarks, Applicants respectfully traverse the objection and rejections of the pending claims.

I. Benefit of Priority

The Examiner indicated that it is not clear whether Applicants claim priority to U.S. Provisional Application No. 60/325,561 ("561 App"). Applicants respectfully submit that the present application claims priority to U.S. Provisional Application No. 60/325,559 ("559 App") only, as indicated in the Preliminary Amendment of April 22, 2002, and submit that the application does not claim priority to the '561 App'.

Applicants have amended page 41, lines 7-11 of the specification to the extent the specification may indicate otherwise.

Regarding the Examiner's request for identification of the portions in prior applications that correspond to features claimed in the present application, Applicants submit that at least pages 18-20, 29, and 30 of the '559 App disclose features that are consistent with the features claimed in the present application.

Regarding the Examiner's request for identification of the features each inventor contributed in the present application, Applicants submit that both inventors contributed to subject matter set forth in claims in the present application. A request to correct the inventorship of the '559 App has been submitted under 37 C.F.R. § 1.48(d) to include Richard NAUDIN as an inventor of the '559 App.

II. Objections to Claims 36 and 44

The Examiner alleged that the disclosures provide no structural support for claims 36 and 44, which appear to invoke 35 U.S.C. § 112, sixth paragraph, by reciting the phrase "means for." Applicants respectfully submit that structural support for "means for receiving a selection by a user . . . ," as recited in claims 36 and 44, is provided throughout the specification.

For example, the specification discloses that "[r]eception of the user-specific information may be performed using one or more of a network (described below), oral communication, visual communication, written communication, physical data carrier (described below), and/or any other means capable of conveying beauty advice."

Page 8, line 20 - page 9, line 2. The specification discloses that a network may include "a local area network, a wide area network, a virtual private network, a dedicated

intranet, the Internet, the Ethernet, a radio network, a telephony-based network, a cellular network, a wireless network, or any other mechanism enabling communication between two or more nodes or locations.” Page 9, lines 2-8. The specification enumerates a list of examples of a physical data carrier as “paper stock, an electronic data carrier, and a computer screen.” Page 9, lines 8-9.

FIG. 4 of the present application also provides structural support for claims 36 and 44. FIG. 4 depicts System 400, which may include Communications Network 410, Users 420, User Profile Database 430, and Merchant 450. As shown in FIG. 4, Users 420, User Profile Database 430, and Merchant 450 may be connected to Communications Network 410, which enables receiving a selection by User 420 via Communications Network 410.

Similarly, FIGS. 5 and 6 depict Communications Network 410 connecting User 420 and User 600, respectively. FIG. 5 further depicts Input device 522, which may be “a keyboard, a mouse, a disk drive, a telephone, a scanner, a microphone, a web cam, and/or any other suitable input mechanism for conveying information to AI engine 540.” Page 15, lines 20-23.

For at least the reasons set forth above, the specification provides structural support for claims 36 and 44. Accordingly, Applicants respectfully request reconsideration and withdrawal of the objections to claims 36 and 44.

III. Rejections of Claims 23, 24, 56, and 57 Under 35 U.S.C. § 112, First Paragraph

The Examiner rejected claims 23, 24, 56, and 57 under 35 U.S.C. § 112, first paragraph, based on purported failures to comply with the enablement requirement and

written description requirement. The Examiner asserted that “[c]laims 23, 24, 56, and 57 refer to artificial intelligence, which is only briefly mentioned, without elaboration, in the disclosures of the instant application and in the provisional applications[.]” Office Action at 4. Applicants respectfully disagree.

Claims 23, 24, 56, and 57 refer not merely to artificial intelligence but to an **artificial intelligence engine**, which is described throughout the specification in such a way as to enable one skilled in the art to make and/or use the invention, and in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention. Contrary to the assertion in the Office Action at page 4, the portion of the specification identified by the Examiner has much more than just a brief mention of the term “artificial intelligence engine” (AI engine).

. . . An **AI engine** may be any system configured to apply knowledge and that can adapt itself and learn to do better in changing environments. Thus, the **AI engine** may employ any one or combination of the following computational techniques: neural network, constraint program, fuzzy logic, classification, conventional artificial intelligence, symbolic manipulation, fuzzy set theory, evolutionary computation, cybernetics, data mining, approximate reasoning, derivative-free optimization, decision trees, and/or soft computing. Employing any computationally intelligent techniques, the **AI engine** may learn to adapt to unknown and/or changing environment for better performance.

Page 11, lines 1-9 (emphasis added).

In addition, the specification describes an AI engine employing a **neural network** (one of the computational techniques listed above):

. . . On a basic level, neural networks may be based on perception, which may include any sensory information, training data set, and/or [perceptions]. Thus, perception data (entry layer) 1110 may be provided to train AI

engine 540. In the beauty product examples, perception data 1110 may represent a wide variety of information, including physical attributes, skin conditions, product information, user preferences, and/or expert advice. Through training, AI engine 540 may obtain exit layer 1120, which represents weighted connections of perception data 1110. Knowledge 1130 gained from exit layer 1120 may be stored at any convenient location, including database 510.

In the neural network embodiment of AI engine 540, the connections may take place on any number of layers. . . . An entry layer 1210 may represent a wide variety of information, including, for example, information on a line of products A, a line of products B, or a line of products C. AI engine 540 may process the information from entry layer 1210 to a hidden layer 1220, which in turn is used to generate weighted connections in an exit layer 1230.

. . . Entry layer 1310 may represent any information, including beauty product information. . . . The information from entry layer 1310 may be processed to a hidden layer 1320. Data from hidden layer 1320 may then be processed to generate knowledge in exit layer 1330 of AI engine 540.

Page 21, line 9 - page 22, line 9.

Further, the specification describes how the AI engine may learn to adapt to unknown and/or changing environment for better performance in detail:

AI engines may be trained based on input such as product information, expert advice, user profile, or data based on sensory perceptions. Using input an AI engine may implement an iterative training process. Training may be based on a wide variety of learning rules or training algorithms. For example, the learning rules may include one or more of the following: back-propagation, real-time recurrent learning, pattern-by-pattern learning, supervised learning, interpolation, weighted sum, reinforced learning, temporal difference learning, unsupervised learning, or recording learning. **As a result of the training, AI engine may learn to modify its behavior in response to its environment, and obtain knowledge.** Knowledge may represent any information upon which AI engine may determine an appropriate response to new data or situations.

Knowledge may represent, for example, relationship information between two or more products. Knowledge may be stored in any form at any convenient location, such as a database.

Page 52, line 15 - page 53, line 4 (emphasis added).

The implementation of an AI Engine is also described in the specification as follows:

In one embodiment, AI engine 540 include a data processor, a personal computer, and/or a mainframe for performing various functions and operations. **AI Engine 540 may be implemented, for example, by a general purpose computer or a data processor** selectively activated or reconfigured by a stored computer program, **or may be a specially constructed computing platform** for carrying out the features and operations described herein. Moreover, AI engine 540 may be implemented or provided with a wide variety of components or systems, including one or more of the following: central processing units, co-processors, memories, registers, and/or other data processing devices and subsystems.

Page 16, line 22 - page 17, line 7 (emphasis added).

The drawings of the present application also disclose exemplary details of an AI engine. For example, FIGS. 9, 11, 12, and 13 illustrate a schematic diagram of an exemplary AI engine consistent with an embodiment of the present invention, and FIG. 14 depicts an exemplary server-side administration display for an AI engine consistent with an embodiment of the present invention. More specifically, FIGS. 9, 11, 12, and 13 illustrate an exemplary representation of AI engine based on a **neural network**.

For at least the reasons set forth above, claims 23, 24, 56, and 57 comply with the enablement requirement and the description requirement under 35 U.S.C. § 112,

first paragraph. Accordingly, Applicants respectfully request reconsideration and withdrawal of the § 112, first paragraph, rejections of claims 23, 24, 56, and 57.

IV. Rejections of Claims 1-10, 13-17, 21, 22, 25, 27-44, 47-55, 58, and 60-72 Under 35 U.S.C. § 102(e)

Applicants respectfully traverse the § 102(e) rejection of independent claim 1 for at least the reason that Voticky fails to disclose every claim element recited in claim 1. Independent claim 1 recites, among others, “simulating . . . at least one **recommended beauty product** on [a] facial image” (emphasis added). The Examiner asserted that “at least Fig. 9, overlay images, ‘after picture’” purportedly discloses “simulating the at least one recommended beauty product on the facial image.” Office Action at 5. Applicants respectfully disagree.

Voticky discloses a client card that displays “after picture,” as shown in FIG. 9. Voticky also discloses a makeover system that displays an “after picture” on a “finished makeover screen 230,” as shown in FIG. 12. These “after pictures,” however, are not simulation of at least one **recommended beauty product** on a facial image. These “after pictures” are formulated after the makeover session using the screen shown in FIG. 10 is completed. The specification of Voticky is very clear that a **user selects** an item to be placed on the image displayed on the screen of FIG. 10. For example, Voticky discloses that “[t]he **user selects** a category option from the list of category option icons 216.” Voticky, col. 8, lines 40-41. Then, “[t]he **user can select** a makeover item from the group of items displayed on the page 200.” Voticky, col. 8, lines 48-50. Then, “[t]he **user selects** an item to place the selected item over the before picture shown in the working area 210.” Voticky, col. 8, lines 51-52. There is no

suggestion in Voticky that the user, **during** the makeover session, can select a product to place over the before picture based on any recommendation received.

Only after the makeover is completed and the “**after picture**” is generated, finished makeover screen 230 of FIG. 12 provides product recommendations. However, these recommendations are made as a list of products, as shown in FIG. 12, and the recommended products are **not simulated** or displayed on the “after picture” or any other images.

For at least the reasons set forth above, Voticky fails to disclose “simulating . . . at least one recommended beauty product on [a] facial image.” Accordingly, Applicants respectfully request reconsideration and withdrawal of the § 102 rejection of independent claim 1 based on Voticky.

Independent claims 22, 36, 55, 68, and 72 recite features that are similar to the features recited in independent claim 1, and thus are rejected on the same grounds. For example, claim 36 recites “a simulator that causes on [a] facial image a visual simulation of . . . at least one selected beauty product and . . . at least one recommended beauty product.” For reasons similar to those set forth with respect to independent claim 1, the § 102 rejection of independent claims 22, 36, 55, 68, and 72 should be withdrawn. Accordingly, Applicants respectfully request reconsideration and withdrawal of the § 102 rejection of claims 22, 36, 55, 68, and 72 based on Voticky.

Claims 2-10, 13-17, and 21 depend from independent claim 1; claims 25 and 27-35 depend from independent claim 22; claims 37-44 and 47-54 depend from independent claim 36; claims 58 and 60-67 depend from independent claim 55; and claims 69-71 depend from independent claim 68. Dependent claims 2-10, 13-17, 21,

25, 27-35, 37-44, 47-54, 58, 60-67, and 69-71 are allowable by virtue of their dependence on an allowable independent claim.

Moreover, claims 2-10, 13-17, 21, 25, 27-35, 37-44, 47-54, 58, 60-67, and 69-71 recite further distinctions over Voticky. For example, claim 3 recites that a “recommended beauty product is simulated on [a] facial image while the simulation of . . . at least one selected product appears on the facial image.” As set forth above with respect to independent claim 1, Voticky fails to teach that a recommended beauty product is simulated on any facial image. Therefore, Voticky cannot possibly teach that a recommended beauty product is simulated on a facial image while the simulation of at least one selected product appears on the facial image.

Also, claim 7 recites “receiving from [a] user an affirmative request seeking a recommendation, and wherein the simulation of the recommended product appears on [a] facial image after the user affirmatively seeks a recommendation.” Voticky teaches that after a user selects an **exit button**, the system displays an “after image” (makeover image without recommended product on the image) and recommended products merely listed under the image. First, selecting an exit button is **not an affirmative request** seeking a recommendation. And, even if selecting an exit button were to constitute an affirmative request seeking a recommendation (a notion Applicants dispute), selecting an exit button does not cause the recommended product to appear on the after image.

For at least these additional reasons, the § 102 rejection of the dependent claims should be withdrawn.

V. Rejection of Claims 11, 12, 18-20, 26, 45, 46, and 59 Under 35 U.S.C. § 103(a)

Applicants respectfully submit that the Office Action fails to establish a *prima facie* case of obviousness with respect to claims 11, 12, 18-20, 26, 45, 46, and 59 for at least the reason that Voticky and Orpaz, taken alone or in combination, fail to teach or suggest every claim element recited in claims 11, 12, 18-20, 26, 45, 46, and 59.

Claims 11, 12, and 18-20 depend from independent claim 1; claim 26 depends from independent claim 22; claims 45 and 46 depend from independent claim 36; and claim 59 depends from independent claim 55. As set forth above with respect to independent claims 1, 22, 36, and 55, Voticky fails to disclose “simulating . . . at least one recommended beauty product on [a] facial image,” as recited in claim 1 and similarly in claims 22, 36, and 55.

The Office Action alleges that Orpaz purportedly “disclose[s] that a first alternative simulated recommendation is displayed simultaneously on the facial image with a display of the at least one selected product, and wherein thereafter a second alternative simulated recommendation is displayed simultaneously on the facial image with a display of the at least one selected product.” Office Action at 12 (citing Orpaz, FIG. 4, col. 4, lines 37-59). However, Orpaz merely discloses that multiple images can be displayed on a screen without disclosing that any of the images is simulated with a recommended product. Thus, Orpaz fails to disclose “simulating . . . at least one recommended beauty product on [a] facial image,” as recited in, e.g., claim 1 and thus fails to cure the deficiencies of Voticky.

For at least the reasons set forth above, Voticky and Orpaz fail to support the § 103 rejection of claims 11, 12, 18-20, 26, 45, 46, and 59. Accordingly, Applicants

respectfully request reconsideration and withdrawal of the § 103 rejection of claims 11, 12, 18-20, 26, 45, 46, and 59 based on Voticky and Orpaz.

VI. Rejection of Claims 23, 24, 56, and 57 Under 35 U.S.C. § 103(a)

Claims 23 and 24 depend from independent claim 22, and claims 56 and 57 depend from independent claim 55. As set forth above with respect to dependent claims 11, 12, 18-20, 26, 45, 46, and 59, Voticky and Orpaz, taken alone or in combination, fail to disclose “simulating . . . at least one recommended beauty product on [a] facial image,” as recited in independent claim 1 and similarly in independent claims 22 and 55. The Examiner took Official Notice, asserting that “it was old and well know[n] at the time the invention was made to analyze historical data to provide guidance concerning consumer preferences.” Office Action at 13. Even if the Examiner’s assertion were true, a notion which Applicants respectfully dispute, the Examiner’s Official Notice assertion fails to cure the deficiencies of Voticky and Orpaz. For at least this reason, Applicants respectfully request reconsideration and withdrawal of the § 103 rejection of claims 23, 24, 56, and 57 based on Voticky, Orpaz, and the Examiner’s Official Notice assertion.

VII. Conclusion


Applicants respectfully request reconsideration of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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